

## **Operating Instructions**

### **Attachment with Radio Control Receiver**

### **Attachment with Radio Control Receiver and Sensor Input**



## **1. Safety Instructions**

**Attention: Electrical equipment must be installed and fitted by qualified electricians only.**

**The blind/shutter control has been exclusively designed for switching blind/shutter motors, respectively. Do not switch any other loads. Other applications such as controlling a sliding gate may entail certain hazards.**

**Please observe the motor manufacturers' information on how to connect the blind/shutter motors in parallel as well as on their reversing time and maximum duty cycle (ED).**

## **2. Function**

This attachment with radio control receiver is a component of the Blind/Shutter Management and the Radio Management systems.

It is used in combination with a motor control insert.

Depending on the actuation of a radio transmitter (e. g. hand-held radio transmitter) or on manual control through the attachment, the shutter slats will be readjusted (short pressing of the pushbutton < 1 s) or the entire blind/shutter moved (long pressing of the pushbutton > 1 s), respectively.

The attachment with radio control receiver can accommodate up to 30 radio channels.

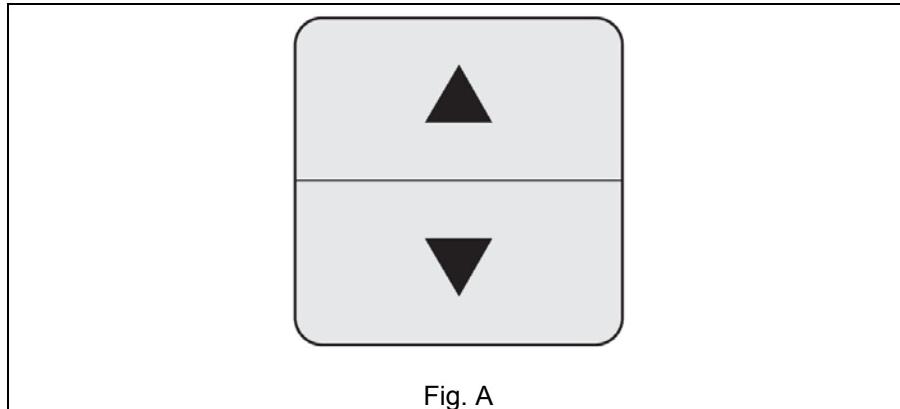


Fig. A

**Lightscape**

You can, for instance, combine into up to five lightscapes the end position of the blind/shutter (completely up, completely down) with the associated lighting configuration. The latter can be saved and recalled with corresponding radio transmitters (e. g. 'Komfort' handheld radio transmitter).

**Sensors**

**(only for attachment with radio control receiver)**

**Sun sensor**

The sun sensor (Fig. B) can be attached to the window pane and offers a sunlight protection function.

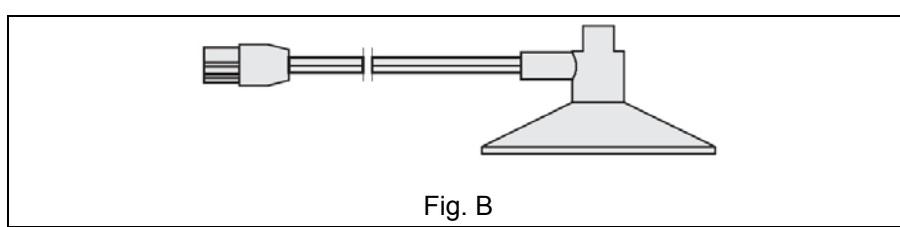


Fig. B

Fix the sun sensor at the height the blind/shutter is supposed to reach if the brightness exceeds the value preset by the potentiometer.

Prior to activating the sunlight protection function, you must bring the blind/shutter to its upper end position in the 'continuous' mode (running time 2 minutes).

The sunlight protection function will move down the blind/shutter about 2 min. after the preset brightness value has been exceeded.

This delay of about 2 min. (hysteresis) is necessary to compensate short-time brightness variations. The blind/shutter will not be moved up and down upon any brightness difference.

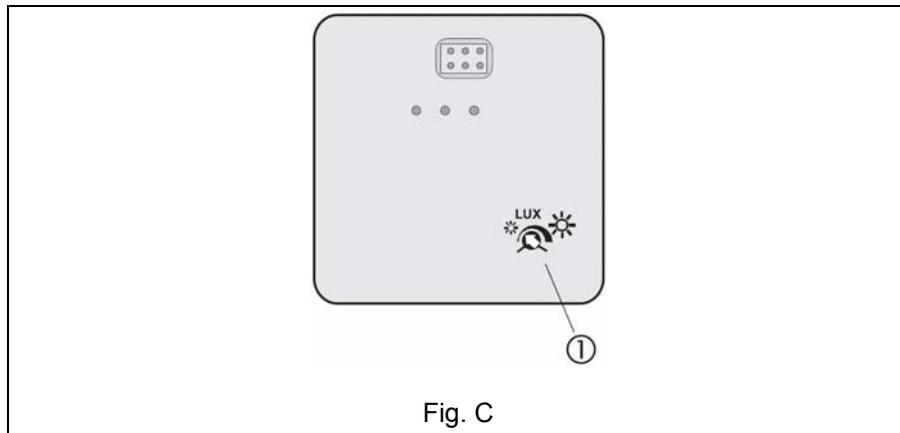
If the brightness remains below the preset value for at least 15 min. the blind/shutter will be moved up again (short-time brightness variations being ignored).

You can use the potentiometer on the back of the attachment (Fig. C ① ) to set the brightness value between approx. 5,000 and approx. 80,000 lux.

Position \*: approx. 80,000 lux

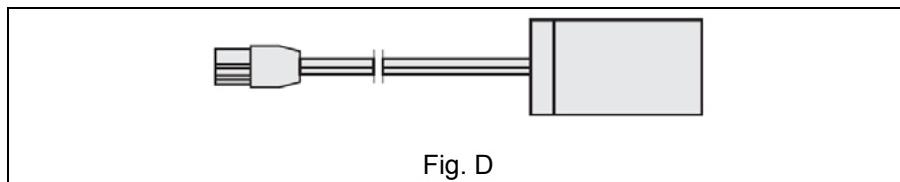
Position \*: approx. 5,000 lux

The potentiometer has been factory-set to about 10,000 lux (position as shown in Fig. C).



#### Glass breakage sensor

The glass breakage sensor (Fig. D) offers protection against the weather in the event of a broken window pane. If a pane is broken, the blind/shutter will move to its lowermost position. You can use the  $\blacktriangle$  key to reset a glass breakage message. This will make the blind/shutter move up.



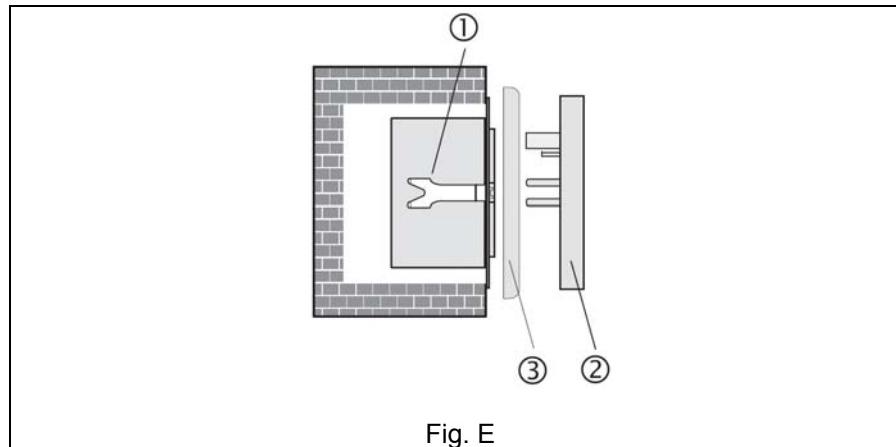
- ① Note: Do not use the glass breakage sensor in conjunction with the wind sensor. If the glass breakage sensor has tripped the wind protection function will be disabled through the extension input ( $\blacktriangle$  Up), with the blind/shutter remaining shut.

### 3. Installation

You can place into operation the attachment only in conjunction with a motor control insert. The operating instructions manual of the insert describes how to connect and install the latter.

#### Procedure

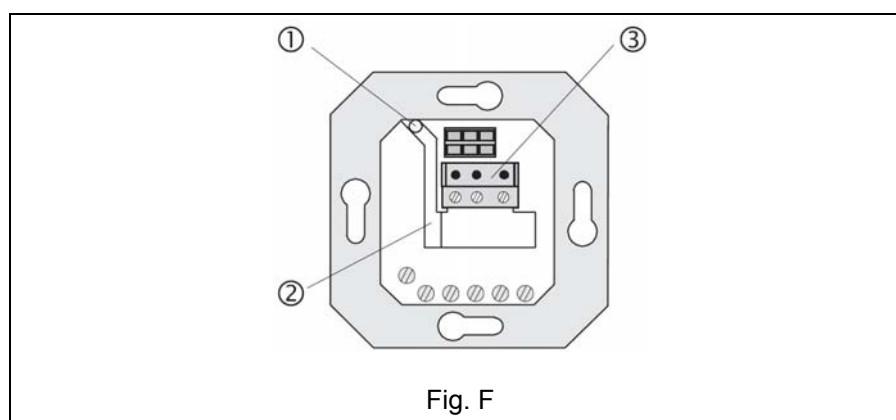
1. Install the motor control insert ① into a flush-mounted box (deep box recommended) with the connecting terminals of the insert at the bottom.
  2. Plug radio pushbutton ② onto the insert together with frame ③ when the mains voltage is disconnected.
- ① Note: The distance to electrical loads (e. g. blind/shutter motor, hifi and TV systems) must be at least 0.5 m.

**Connecting the sensors  
(only for attachment with sensor input)****Important**

- ① The sensor line carries safety extra-low voltage (SELV). Please observe the installation instructions of VDE 0100.
- ① For the description, installation and connection of the insert, please refer to the operating instructions manual of the „motor control insert“.

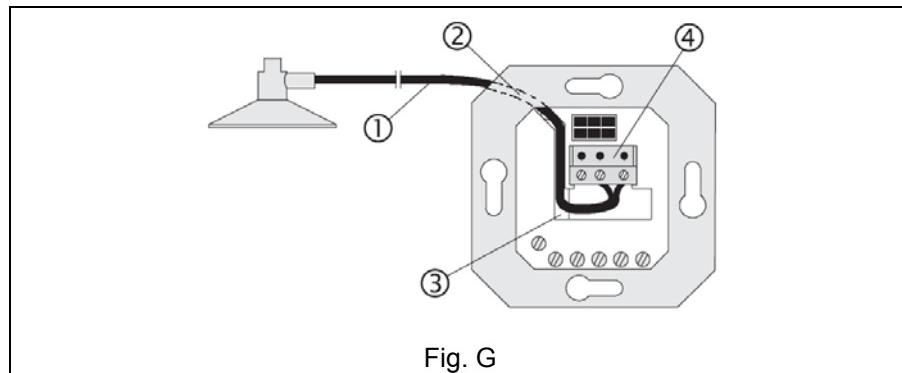
**Sensor concealed wiring procedure (Fig. F)**

1. Choose a cable type suitable for the installation of the sensor wiring. Recommended cable: J-Y(ST)Y 2x2x0.6 mm.
2. Pass the individual wires of the sensor cable through the insulating sleeving supplied with the device. Then lead the wires together with the sleeving through opening ① of the insert.
3. Run the wiring through duct ② to connecting terminal ③. The sleeving must insulate the full length of the single wires from the outer jacket to the connecting terminal.
4. Press the terminal block into the insert as shown in Fig. F.



**Sensor surface wiring procedure (Fig. G)**

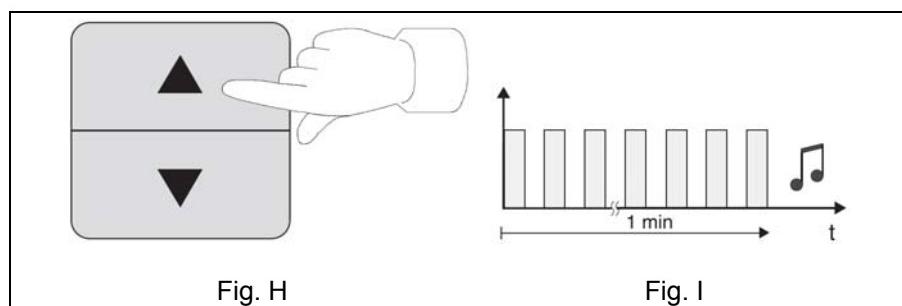
1. Pass the sensor cable ① behind the mounting frame (between wall and frame) through opening ② into the duct ③ of the insert.
2. Lead the line through the duct down to terminal connector ④. The line must be laid properly in the duct and run straight to the terminals without forming any loops in the 230 V AC connecting compartment.
3. Press the terminal block into the insert as shown in Fig. G.

**4. Programming a Radio Transmitter**

In the programming mode, the sensitivity of a radio receiver is reduced to approx. 5 m. Therefore, the distance between the attachment with radio control receiver and the radio transmitter to be programmed should be between 0.5 m and 5 m.

**Procedure**

1. Press the full surface area of the cover for about 4 s (Fig. H) to get into the programming mode. This will activate the programming mode for about 1 min. and be indicated by a sequence of tone pulses (Fig. I).



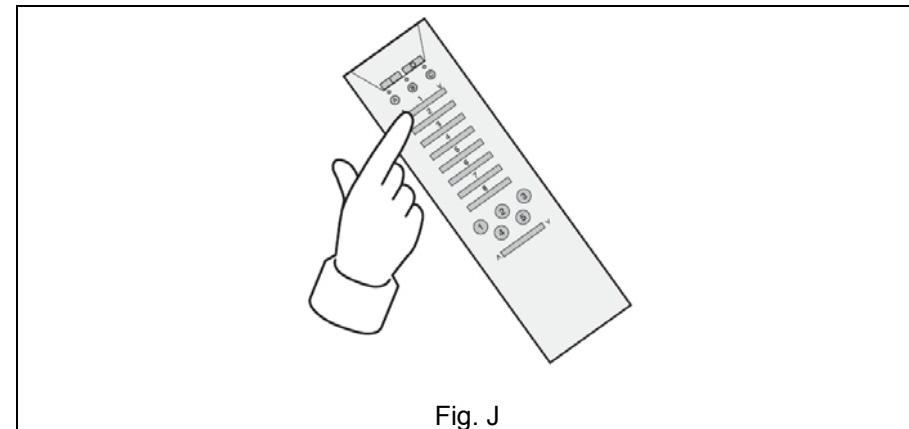
2. Start the selected radio transmitter to send a data telegram (Fig. J); refer to the „Radio Transmitter“ operating instructions manual).:

**Programming a channel**

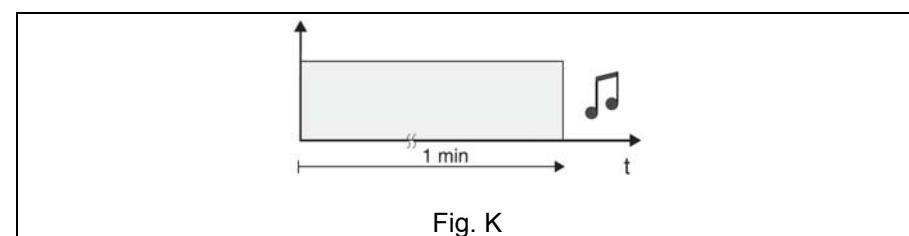
Press the channel key for more than 1 second..

**Programming a lightscape key**

Press the lightscape key for more than 3 seconds.



3. The radio pushbutton will confirm storage by a continuous tone (Fig. K).

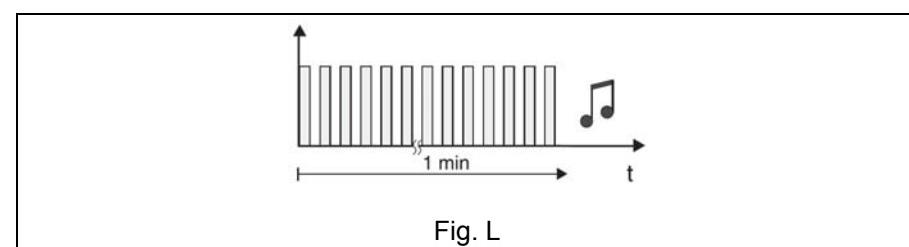


4. You will automatically exit the programming mode after about 1 min. or by shortly pressing one of the rockers of the attachment.

① Note: If all of the 30 memory locations are occupied you will have to delete one of the transmitters already stored to program another one.

**Deleting a Radio Transmitter**

You can delete a radio transmitter already stored by reprogramming the same. You must delete all channels and lightscape keys individually. Successful deleting will be confirmed by a tone having a higher pulse frequency than for programming (Fig. L)



## 5. Operation

The rocker of the attachment has two positions. For operation, distinction is made between long-time and short-time pressing of the pushbutton.

You can use the ▲ key to move the blind/shutter up and the ▼ key to move it down.

### **Short-time pressing of the pushbutton (up to 1 s)**

It will move the blind/shutter for the period the pushbutton is held pressed (e. g. slat readjustment). You can press the pushbutton for a short time to stop a moving blind/shutter.

### **Long-time pressing of the pushbutton (at least 1 s)**

It will start the blind/shutter motor for some 2 min. The blind/shutter will be moved up or down. After this time has elapsed or the mechanical or electronic limit switches have been reached, the motor will stop.

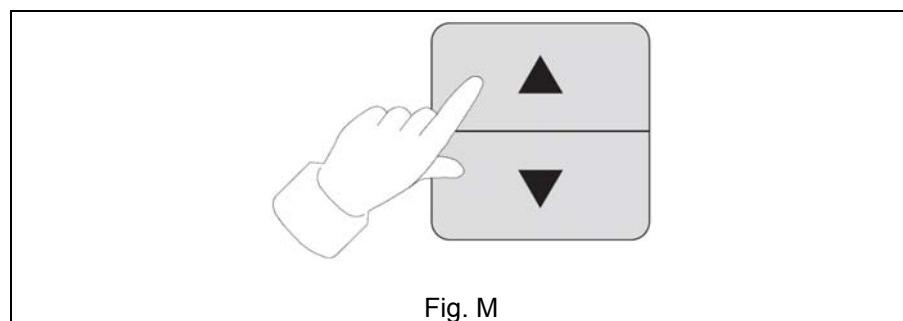


Fig. M

### **Lightscape**

The end positions of a blind/shutter and the corresponding lighting can be combined and stored into a lightscape. You can change a lightscape any time by reprogramming. Before saving or recalling a lightscape, you must have programmed the lightscape key of the radio transmitter (please refer to „Programming a Lightscape Key“).

### **Saving a lightscape**

1. Move the blind/shutter to the desired end position.
  2. Press the desired lightscape key of the radio transmitter for at least 3 s.
- ① Note: If the blind/shutter is not at one of its end positions or on the way there while a lightscape is being saved this blind/shutter will not be stored in such lightscape.

## 6. Radio Transmission

Radio transmission takes place on a non-exclusive path. Therefore, interference cannot be excluded. This type of radio transmission is not suitable for safety applications such as emergency stops or emergency calls.

The range of a radio-control system depends on transmitter power, receiver characteristics, air humidity, fitting height and building conditions. The figure illustrates the penetration of building materials by radio waves:

| Dry material                               | Permeability     |
|--|------------------|
| Timber, gypsum, gypsum-plasterboards       | approx. 90 %     |
| Brickwork, particle boards                 | approx. 70 %     |
| Reinforced concrete                        | approx. 30 %     |
| Metal, metal grating, aluminium lamination | approx. 10 %     |
| Rain, snow                                 | approx. 0 - 40 % |

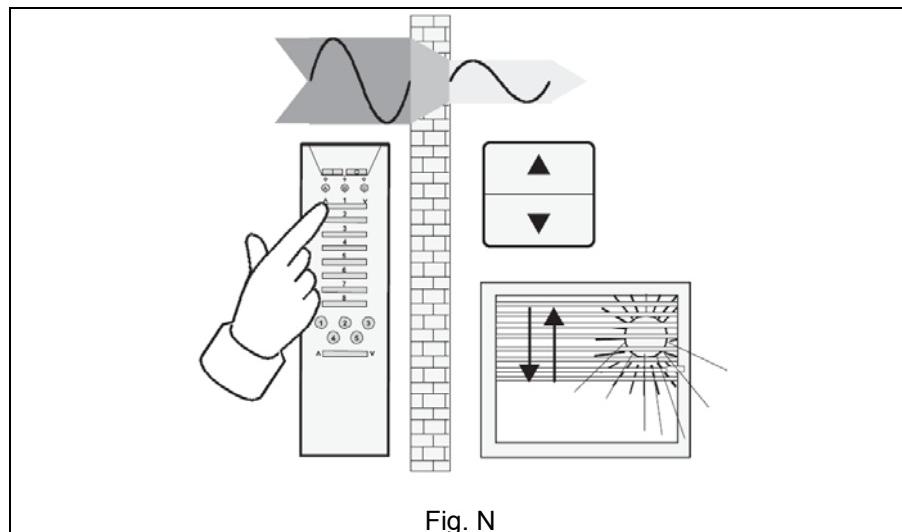


Fig. N

### Radio operation

- The inter-connection of this radio system with other communication networks must comply with national legislation.
- This radio system must not be used for communication beyond property boundaries.
- If utilized in conformity with its designated use, this unit fulfils the requirements of the R&TTE Directive (1999/5/EC). The complete declaration of conformity can be found in the Internet under:  
[www.jung.de/ce](http://www.jung.de/ce)

**The attachment with radio control receiver may be operated in all countries of the EU and the EFTA.**

## 7. Technical data

|   |                            |
|---|----------------------------|
| Power supply :                                | from flush-mounting insert |
| Receive frequency :                           | 433.42 MHz, ASK            |
| Number of radio channels :                    | 30                         |
| Switch-over time for<br>directional changes : | approx. 1 s                |
| Temperature range :                           | approx. 0 °C ... +55 °C    |
| Technical specifications subject to change.   |                            |

## 8. Guarentee

We accept the guarantee in accordance with the corresponding legal provisions.

**Please return the unit postage paid to our central service  
department giving a brief description of the fault:**

ALBRECHT JUNG GMBH & CO. KG  
Service-Center  
Kupferstr. 17-19  
D-44532 Lünen  
Service-Line: +(49) 23 55 . 80 65 51  
Telefax: +(49) 23 55 . 80 61 89  
E-Mail: mail.vka@jung.de

### General equipment

Service-Line: +(49) 23 55 . 80 65 55  
Telefax: +(49) 23 55 . 80 62 55  
E-Mail: mail.vkm@jung.de

### KNX equipment

Service-Line: +(49) 23 55 . 80 65 56  
Telefax: +(49) 23 55 . 80 62 55  
E-Mail: mail.vkm@jung.de



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